# Marasprint SP

Marasprint SP						
Informacija o proizvodu						
Sistem boja	1-komp.					
Sušenje	brzo					
Stepen sjaja	satenski					
Pokrivnost	odlična					
Otpornost na spoljnu temperaturu	odlična					
Specijalne karakteristike	veoma dobra za vakuumsko oblikovanje					
Osnovne nijanse	14					
Procesne nijanse	4					
Ostalo	1					
Specifičnost	elastičan sloj boje					

Dodaci					
Razređivač	SPV				
Razređivač, srednje jačine	UKV 2				
Usporivač	-				
Usporivač, sporji	SV 1				
Usporivač pasta	VP				
Učvršćivač	-				
Lak nakon štampanja, vezivo za bronzu	-				
Transpare- ntna baza	-				
Čistač	UR 3				

Podloge			
Polistiren (PS)			
ABS / SAN			
Samolepljiva PVC folija			
Tvrdi PVC	I		
Meki PVC	I		
Polikarbonat (PC)			
Poliester			
PETG, PETA			
Klirit (PMMA)	m		
PE, PP, tre- tirani			
PP, netretirani			
Poliamid (PA)			
Poliacetat (POM)			
Termostabilna plastika			
Papir, tala- sasta lepenka	I		
Slojevite podloge			
Eloksirani aluminijum			
Metal			
Staklo			
Drvo			
Tekstil, sinte- tika			
Tekstil, pamuk			
Tipične ili dopunske aplikacije	pogodna za štampu na displejima		

# **Screen Printing System Ink**

Satin-gloss, medium opaque, fast drying, fading resistant, suitable for moulding and welding

# **Field of Application**

#### Substrates

Marasprint SP is particularly applicable on acrylic glass, polystyrene, rigid and soft PVC, PVC self-adhesive foils, thicker types of paper and cardboard.

Since all the print substrates mentioned may be different in their printability, even within an individual type, preliminary trials are essential to determine the suitability for the intended use.

# Fields of use

Customers have good experiences when printing Marasprint SP on acrylic glass which is exposed outdoors. Marasprint SP is also suitable for the production of displays made of polystyrene and rigid PVC as well as for printing on self-adhesive foils because of the high elasticity of the ink film

# **Characteristics**

# **Drying**

Physically quick-drying, dries at  $20^{\circ}$  C within 10 min (ready to be overprinted), and at  $50^{\circ}$  C in a dryer within 20 - 30 seconds.

The times mentioned vary according to the substrate, the ink film thickness, drying conditions and the auxiliaries used. When overprinting the ink an extended drying time is necessary due to the solvent retention of the previously printed colour.

# Fading resistance

We are using pigments of an excellent fading resistance for all shades of our Marasprint SP ink type.

By mixing the shades with printing varnish, transparent base and other shades, especially by mixing white into the other shades, the fading resistance mostly decreases. This fading resistance also decreases, if the thickness of the printed ink film decreases.

The pigments used are resistant to plasticizers and solvents.

# Stress resistance

Once the ink film is thoroughly dried, it is flat and elastic, has an insensitive surface, it is fading resistant, scratch- and impact-resistant, shock-proof and rub-resistant, suitable for moulding and welding. Please note that the shade SP 073 black is not suited for welding. We recommend the use of MS 173 welding black instead of this shade.

In case of a higher demand on rub-resistance, we recommend to overvarnish.

# **Marasprint SP**

For acrylics, rigid and soft PVC, PVC self-adhesive foils, thicker types of paper as well as for cardboard

# Range

### **Shades**

Compare basic colour fan "Maraspeed SL"

SP	020	Lemon	SP	055	Ultramarine Blue
SP	021	Medium Yellow*	SP	058	Dark Blue
SP	022	Yellow Orange*	SP	059	Royal Blue
SP	031	Scarlet	SP	067	Grass Green*
SP	033	Magenta	SP	068	Brilliant Green
SP	035	Bright Red	SP	070	White
SP	036	Vermilion*	SP	073	Black

With production date from May 1994 onwards, the shades are all based on organic pigments. Therefore, none of the shades contains heavy metals according to the EEC regulations EN 71, part 3, "safety of toys" - migration of specific elements. All basic shades are therefore entirely suited for the printing on toys.

Until production date April 1994, the shades marked \* in the aformentioned shade range do contain lead chromate pigments. These shades are specially labelled "contain lead chromate". Therefore these shades must not be used for printing on toys.

By using these 14 basic shades in accordance with the mixing ratios given in the Marabu-datamix software, it is possible to produce shades of all popular ink systems, e.g. Marabu system 21, RAL, HKS.

Marabu-mix colour matching system contains Marasprint SP.

All shades are intermiscible. The ink should not be mixed with other types of ink to maintain the special characteristics of this outstanding ink range.

In addition to these basic shades is available: SP 170 Opaque White

The opaque white is less glossy and less elastic due to a higher amount of pigments. This shade is not suitable for moulding. Please use SP 070 White instead. If necessary, the Standard White shade can be printed with fabrics up to 77 - 90 threads/cm.

For 4-colour-process-prints we offer the following EURO-shades:

SP 429 Process-Yellow SP 459 Cyan SP 439 Magenta SP 473 Process Black

Due to their specific application (printing on luminous banners), the shades SP 429, SP 439, SP 459 are higher pigmented than usually. Therefore they should be admixed with transparent base SPT approximately in the ratio 1:1 in order to obtain the proper density of the shades.

If necessary, 4-colour-process inks can be mixed with halftone concentrate.

# **Marasprint SP**



Due to the specific nature of 4-colour-process-printing in the ink formulation, the above mentioned 4 shades are not suited for moulding.

The thinner PSV does not dissolve the surface of polystyrene or acrylics. Thus, a faster drying is obtained and the material is stackable within a very short time.

# **Additives**

Transparent base: SPT

Printing varnish: SPL (can also be used as

bronze binder)

Bronze powders (to be admixed with varnish SPL)

S 181 Aluminium S 184 Pale Gold S 182 Rich Pale Gold S 186 Copper

S 183 Rich Gold S 190 Aluminium (rub-resistant)

(For the processing of the bronze powders we refer to our separate data-sheet: Screen Printing Bronze Inks).

# **Auxiliaries**

Thinner: SPV Universal-Thinner: UKV 2

Special-Thinner: PSV (for substrates susceptible

to solvent corrosion)

Jet- or Special-Thinner: SPJV
Retarder: SV 1
Retarder Paste: VP
Plastizicer: WM 1
Cleaner: UR 3
Printing modifier: ES

To adjust the printing viscosity it is generally sufficient to add  $10\,\%$  thinner to the ink.

To produce a retarding effect for slow printing sequences the retarder is added to the thinner proportionately (about half the quantity).

Any subsequent thinning of an ink prepared with retarder should be carried out only with pure thinner.

For special prints pure retarder SV 1 can also be used.

Instead of standard thinner SPV we recommend the use of our thinner PSV, if the substrate is sensitive to any retention of solvents.

### **Fabrics and Stencils**

All types of commercially available fabrics can be used.

All solvent-resistant products are suitable as screen materials.

# Labelling

For our ink type Marasprint SP and its additives and auxiliaries there are current Material Safety Data Sheets according to EC-regulation 91/155, informing in detail about all relevant safety data including the labelling according to the present EEC regulations as to health and safety labelling requirements. Such health and safety data may also be derived from the respective label.

The ink has a flash point of above 21° C. Since the ink is not considered as a flammable liquid due to its pastous nature, any specific regulations for the handling of flammable liquids do not apply for the ink.

# **Recommendation**

To protect the ink in opened containers against excessive drying, it can be carefully covered with a layer of thinner which is later stirred into the ink prior to printing.

# Note

Our technical advice whether spoken, written, or through test trials corresponds to our current knowledge to inform about our products and their use. This is not meant as an assurance for certain properties of the products nor their suitability for each application. You are, therefore, obliged to conduct your own tests with our supplied products to confirm their suitability for the desired process or purpose. The selection and testing of the ink for specific application is exclusively your responsibility.

Should, however, any liability claims arise, such claims shall be limited to the value of the goods delivered by us and utilised by you with respect to any and all damages not caused intentionally or by gross negligence.